

## **COVID-19 Monthly Epidemiological Report** January 2022

Unless otherwise indicated, this report is based on a combination of data extracted from Texas Health Trace on 11/12/2021 and National Electronic Disease Surveillance System on 02/14/2022, and includes cases with event dates through 01/31/2022. Due to the recent surge, some January data is still being obtained and any missing data has not been included in this report (including hospitalization and death comorbidities, average age of death, and vaccination breakthroughs). Results are subject to change.

### **Key Takeaways**

### **New Cases & Positivity Rate**

- Reported<sup>1</sup> cases increased from 11,744 in December 2021 to 147,899 in January 2022 (a 12 fold increase).
- Average test positivity rate increased from 10% in December to 35% in January (a 3-fold increase).
- Over the course of the pandemic through January 2022, 26% of Bexar County residents (1 in 4 persons) are known to have had COVID-19.

### **Hospitalizations and Deaths**

- COVID-19 positive hospital admissions<sup>2</sup> increased from 1,078 in December to 4,293 in January (a 3-fold increase).
- Reported COVID-19 related deaths increased from 25 in December to 121 in January (a 4-fold increase).

### Cases and Age

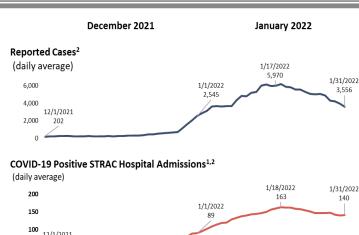
• In January, age group 10-19 years made up the largest proportion of new COVID-19 cases (18%), followed by age group 20-29 years (17%).

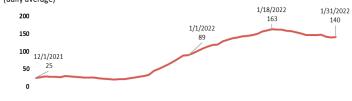
The month of January '22 (1st - 31st) saw 147,899 cases reported, an 12 fold increase compared to December '21 (11,744 new cases reported). The daily average of reported cases increased from 379 in December to 4,771 in January.

Hospital admissions of COVID-19-positive patients<sup>2</sup> increased 3-fold, from 1,078 in December (average 35 per day) to 4,293 (average 138 per day). Reported deaths increased 4-fold from 25 reported during December (1 deaths per day) to 121 reported during January (4 per day). Although total tests reported increased by 0.8-fold (almost doubled, from 223,034 during December to 392,835 during January), average test positivity increased from 10% to 35%, the highest percent positivity observed to date.

The graphs show daily averages (calculated as +/- 3 days) for each indicator over the months of December and January, plus values at the beginning and end of each month and January maxima and minima. By the latter part of January reported new cases, hospital admissions, and test positivity rate were all in decline; reported deaths were still increasing.

- 1. Reported cases and deaths may have occurred anytime during the previous 14 days. Delayed reports (backlogged cases) are not included in these data.
- 2. COVID-19 positive hospital admissions include all patients who test positive for COVID -19 at STRAC hospitals at time of admission, regardless of reason for admission, including patients who reside outside Bexar County (https://dshs.texas.gov/ coronavirus/DataDefinitions.aspx). STRAC hospitals are general and specialty hospitals in Bexar county designated by the Southwest Texas Regional Advisory Council as part of the local trauma/emergency healthcare system. They include hospitals in the Baptist, Christus, Methodist, SW General, University, BAMC and VAMC systems treating COVID-19 positive patients.





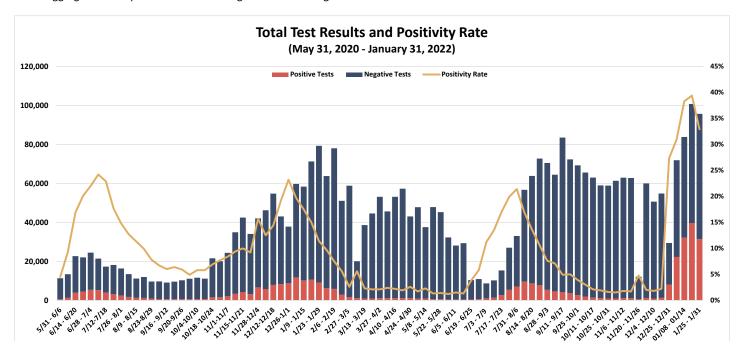




## II. Testing & Positivity Rate

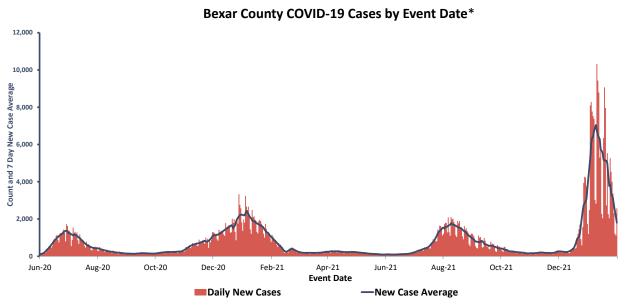
Bexar County's weekly COVID-19 test positivity rate (yellow line) increased throughout the first three weeks of January and declined in the fourth week. January saw an average **positivity rate of 35% compared to December's average of 10%**. Processed tests totaled 392,835 during the month of January, a 43% increase compared to 223,034 tests in December.

Source: Aggregate Lab Report of labs conducting COVID-19 testing



## III. Trends Among COVID-19 Cases

January '22 saw the largest daily increase and highest peak in COVID-19 cases since the pandemic started. January had a peak of 10,323 daily cases, compared to approximately 300 daily cases seen at the beginning of December '21. The number of daily new cases rapidly declined to 2,575 by the end of January, a number similar to daily new cases seen at previous surge peaks.



Average shown is a centered moving average calculated as  $t_0$  +/- 3 days

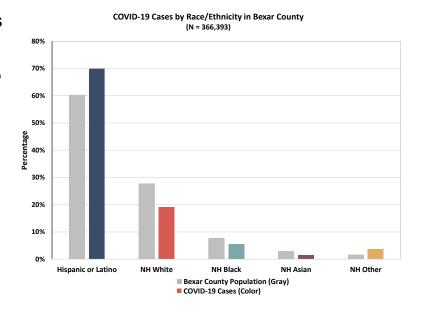
<sup>\*</sup>Event date refers to either illness onset date (for symptomatic cases) or test collection date (for asymptomatic cases, or when onset date is not available). This differs from reported date.

### III. A. Race/Ethnicity Distribution of Cases

Among cases for whom race/ethnicity data are available<sup>1</sup>, Hispanic individuals continue to make up the majority of total COVID-19 cases. Although Hispanics make up 60% of the Bexar County population, they represent 70% of cases with known race/ethnicity.

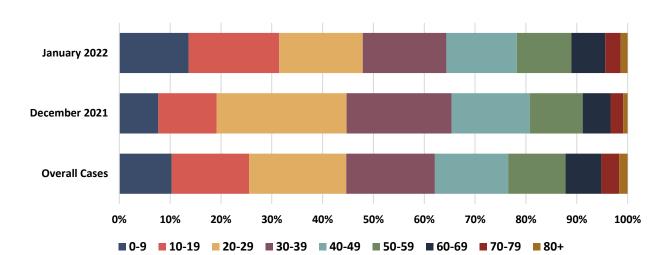
#### Notes:

- 1. Data on race and/or ethnicity are currently unavailable for about 29% of cases.
- 2. The number of Bexar County residents is the ACS (5-yr) 2019 population estimate.
- 3. NH = Non-Hispanic



### III. B. Age Distribution of Cases

## COVID-19 Cases by Age Group in December 2021, January 2022, and Overall (January 2022 N =152,826; December 2021 N = 31,842; Overall N=513,252)

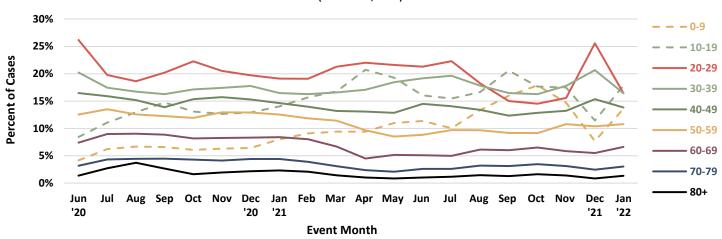


In January '22, age group 10-19 years made up the largest proportion of COVID-19 cases at 17.8%, followed by cases aged 20-29 (17%) and 30-39 years (16%). The percentages of cases in age groups 20-29 and older are each lower in January than the entirety of the pandemic. Notably, age group 0-9 made up 14% of January cases in comparison to 10% of all cases throughout the pandemic. The average age of cases in January (33 years) is lower than the average age of all cases during the pandemic (35 years).

<sup>\*</sup>Excludes 92 cases with age not available (0.02%)

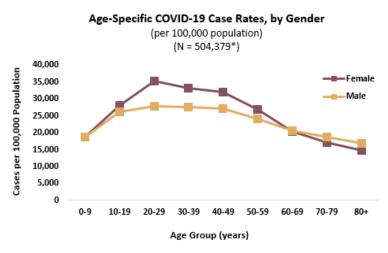
### New Cases Over Time, by Age Group (%)

(N = 513,252)



In January '22, the highest portion of cases occurred among ages 10-19 (sage dashes), followed in order by age groups 20-29 years (red), 30-39 (solid sage), 0-9 years (beige dashes), 40-49 (dark green), 50-59 (solid beige), 60-69 (dark maroon), 70-79 (dark blue), with the lowest among those age 80+ years of age (black). The age group 80+ has comprised the smallest percentage of cases throughout the pandemic. From December '21 to January '22, the largest increase in cases were among the 0-9 and 10-19 age groups.

### III. C. Age and Gender Distribution of Cases



Excludes 8,975 cases (2%) for whom age and/or gender was not available.

The highest age-specific rates<sup>†</sup> of COVID-19 have been among age groups 10-19 to 50-59, and especially younger adult women, throughout the pandemic.

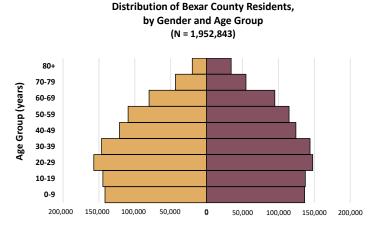
Through the end of January '22, the age-adjusted‡ COVID-19 case rates were 27,178 cases per 100,000 females and 24,443 cases per 100,000 males (females 11% higher than males). There were approximately 7,000 cases per 100,000 for each gender in January alone. The overall age-adjusted case rate for the County is now 26,228 cases per 100,000 population.

<sup>\*</sup>Excludes 92 cases with age not available (0.02%)

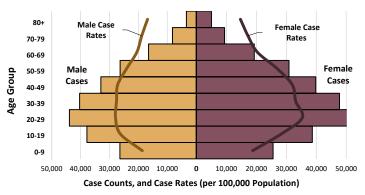
<sup>†</sup>Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County

<sup>‡</sup>Age-adjusted rates are weighted using the US Standard Population 2000.

## IV. COVID-19 in the Bexar County Population

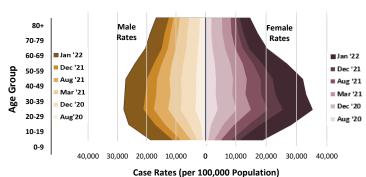


Distribution of COVID-19 Cases by Gender and Age Group, with Respective Case Rates per 100,000\* (N = 504,379 Cases\*)



\*Excludes 8,965 cases (1.8%) for whom age and/or gender was not available.

#### Cumulative Cases Rates over Time, by Gender and Age Group,



\*Excludes 8,965 cases (1.8%) for whom age and/or gender was not available.

Through the end of January '22, a total of 513,344 Bexar County residents are known to have had COVID-19; January added 152,839 cases (30% of the total to date).

To date, 26% of Bexar County residents (1 in 4 persons) are known to have had COVID-19: 27% of females and 24% of males. Only among adults ages 70 and older does the male rate exceed that of females, by 10%. The overall age-adjusted case rate (AAR) is now 26,228 cases per 100,000 residents (female AAR is 12% higher than the male rate).

Age-specific case rates† by gender per 100,000 Bexar County residents are shown by the curved lines superimposed on the case pyramid. Among children ages 0-9 years, the case rate is now 18,984 cases per 100,000 population, with 52,801 cases to date. Young people ages 10-19 years have case numbers and rates intermediate between those of young children and young adults, with 78,262 cases to date and a case rate of 27,791 per 100,000.

Young adults 20-29 years continue to have the highest case numbers and rates: now 98,142 cases, which is 32,185 cases per 100,000 population. The oldest age group, ages 80+ years, now has the lowest case rate, at 15,764 cases per 100,000 population.

This month, the gender disparity in age-specific cumulative case rates among persons in age groups 20-29 through 50-59 years was greater than at any time in the pandemic. Through the end of January, females ages 20-29 had a cumulative rate of 35,323 cases per 100,000 population compared to 27,899 for males, a 27% disparity. As shown by the curved lines on the case pyramid and on the previous page, cumulative rates among males are now very similar for age groups 10-19, 20-29, 30-39 and 40-49 (about 27,000 to 28,000 cases per 100,000), which is different from the pattern for females.

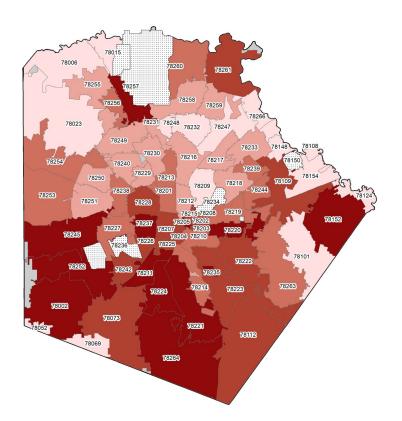
As shown in the bottom figure, the flattening of the younger adult male case rates across age groups began by December '21 but was most evident in January '22.

#### Notes:

<sup>†</sup>Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County.

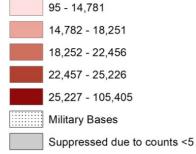
<sup>‡</sup>Age-adjusted rates use age-specific rates weighted according to the US Standard Population 2000.

### Overall COVID-19 Case Rates per 100,000 Population

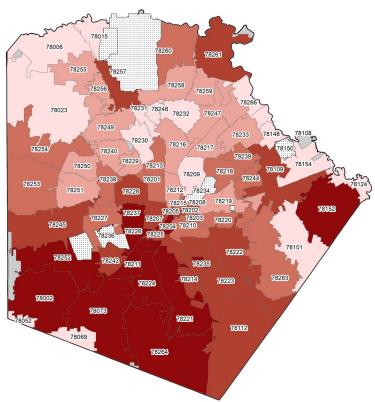


The geographic distribution of total COVID-19 case rates by zip code continues to show the highest rates of infection have generally been in the southern portion of Bexar County. The rates range from 95 per 100,000 population to 105,405 per 100,000 population.

## Overall COVID-19 Case Rate per 100,000 population

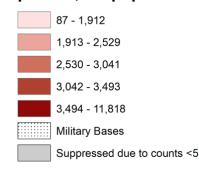


January '22 COVID-19 Case Rate per 100,000 Population



For the month of December '21, the highest rates of new COVID-19 infections occurred in the far northern and southwestern portions of Bexar County. New monthly case rates ranged from 87 cases per 100,000 population to 11,818 cases per 100,000 population during the month of January '22.

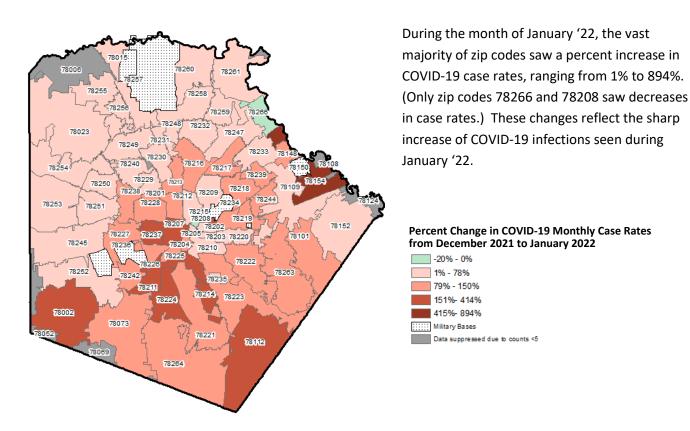
## January 2022 COVID-19 Case Rate per 100,000 population



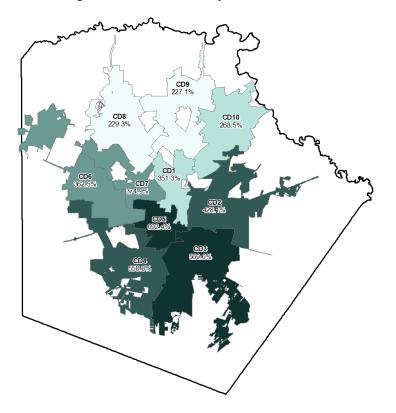
Data Source: SAMHD COVID-19 case data through 2/14/2022, event dates through 1/31/2022; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101

## V. Percent Change of COVID-19 Cases, December '21 - January '22

### Percent Change in COVID-19 Case Rates from December '21 to January '22 by Zip Code



### Percent Change in COVID-19 Monthly Case Rates from December '21 to January '22 by Council District



The map to the left depicts the percent change in COVID-19 case rates from December '21 to January '22 by City of San Antonio Council District. In comparison to December '21, every council district saw a percent increase in new cases during January '22, ranging from 227% to over 690%. Council Districts 5 and 3 saw the largest increases of 692% and 570%, respectively. The City of San Antonio overall saw a 396% increase in new cases in January '22 compared to December '21.

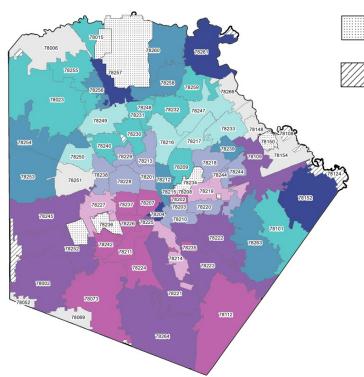
Military Bases

Suppressed due

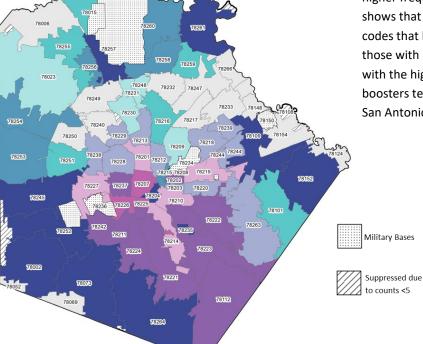


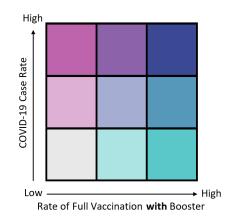
### VI. COVID-19 Vaccination Data

## January '22 COVID-19 Case Rate and Rate of Full Vaccination with Booster by Zip Code



# January '22 COVID-19 Case Rate and Rate of Full Vaccination without Booster by Zip Code

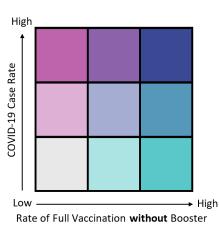




These maps combine two metrics: January '22 COVID-19 case rates (based on Event Date) and the overall rate of COVID-19 full vaccination status with (top map) and without (bottom map) boosters. Colors darken as rates of each metric get higher. Each rate is categorized by lowest, middle, and highest thirds.

The relative abundance of cyan zip codes in the top map compared to the bottom one illustrates that low case rates were more commonly found in zip codes with high booster rates than in those with high rates of vaccination without boosters. These zip codes tended to be on the north side of San Antonio and in the far northwest regions of Bexar County.

The inverse is also true, visualized by magenta zip codes' higher frequency on the top map than on the bottom one. This shows that high case rates were more commonly found in zip codes that had low vaccination rates with boosters than in those with low vaccination rates without boosters. Zip codes with the highest case rates and lowest rates of vaccination with boosters tended to be on the center-west and south sides of San Antonio.

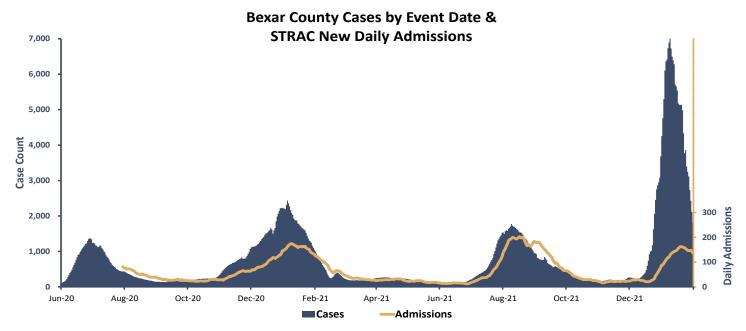


Data Source: SAMHD COVID-19 Database, as of 01/10/2022; U.S. Census Bureau, ACS 2019 5-Year Estimates, Table S1701

## VII. Hospitalizations Among COVID-19 Cases

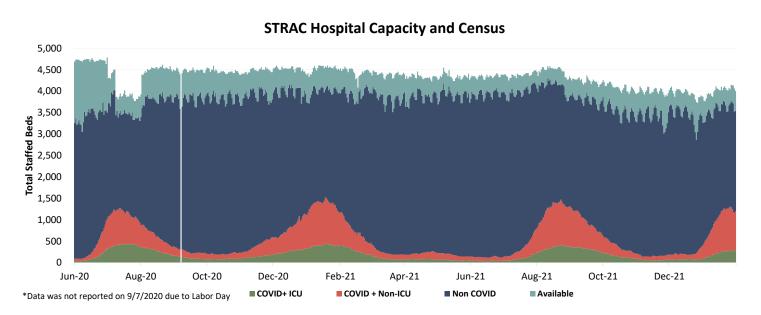
During the recent winter case surge, the daily new case average\* peaked during January '22 at 7,000 cases; however, **January COVID-19 positive daily hospital admissions remained comparable to previous surges**.

Note: COVID-19 positive hospital admissions include all patients who test positive for COVID-19 at a STRAC hospital\* at time of admission, regardless of reason for admission, including patients who reside outside Bexar County. Daily admission data before 7/29/2020 was not available at time of analysis.



Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 2/14/2022

In January '22, COVID+ Non-ICU (coral) and COVID+ ICU occupancy (green) reached 910 and 208 beds per day, respectively, which was more than any point in December '21. Available (unoccupied) staffed beds (teal) made up about 12% of total staffed beds at the end of January. Non-COVID+ occupancy (navy) was 18% lower at the end of January than at the end of December.



Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 2/14/2022.

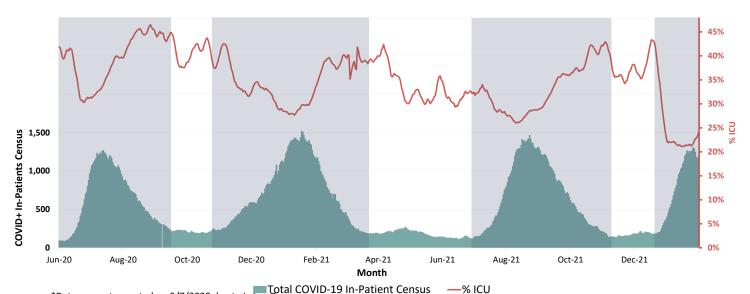
\*STRAC hospitals are general and specialty hospitals in Bexar county designated by the Southwest Texas Regional Advisory Council as part of the local trauma/emergency healthcare system. Includes hospitals in the Baptist, Christus, Methodist, SW General, University, BAMC and VAMC systems treating COVID+ patients.

<sup>\*</sup>Average shown is a centered moving average calculated as  $t_0 + /- 3$  days

During the most recent winter surge, COVID+ patients in the ICU accounted for less than 25% of all COVID+ inpatients, the lowest seen during the pandemic. Overall, and throughout each surge, there has seen a lower percentage of COVID+ inpatients in the ICU compared to the previous one.

Note: Patients typically stay several days in the hospital, especially in the ICU.

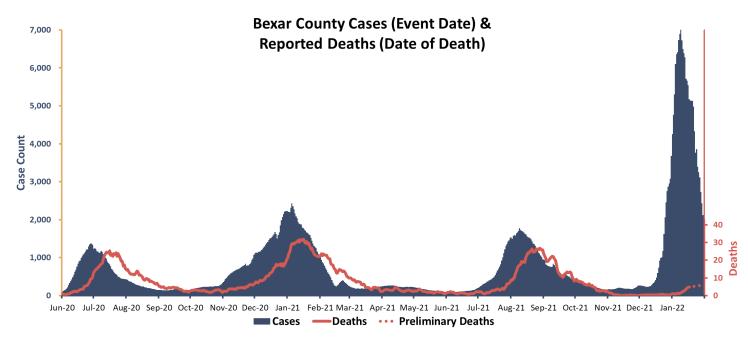
### STRAC COVID-19 In-Patient Census



\*Data was not reported on 9/7/2020 due to Labor Day
Data Source: COVID-19 Daily Surveillance Data Public STRAC Data, pulled on 2/14/2022

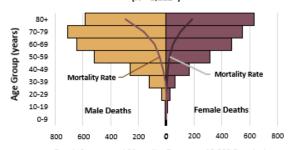
## VIII. Deaths Among COVID-19 Cases

Over the course of the pandemic, average\* deaths peaked at about 30 per day compared to average case peaks at range from 1,400 to 2,400 cases. While the average case peak for the most recent surge is almost 7,000 cases, a peak for deaths remains to be seen. The last two weeks of January '22 are considered preliminary as death certificates make their way to Metro Health for confirmation.



Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 2/14/2022 Note: Average shown is a centered moving average calculated as t0 +/- 3 days

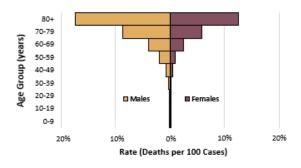
Deaths by Gender and Age Group, with Age-Specific Mortality Rates (N = 5.112\*)



Death Counts, and Mortality Rates per 10,000 Population

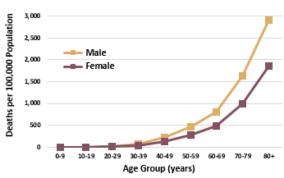
\*Excludes 40 cases (0.8%) for whom gender and/or age are unavailable.

#### Case Fatality Rates\*



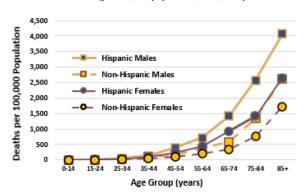
 N = 5,112 Deaths among 504,379 Cases. Excludes 40 Deaths (0.8%) and 8,965 Cases (1.8%) for whom gender and/or age are unavailable

### Age-Specific Mortality Rates, by Gender (per 100,000 population; N = 5,112\*)



Excludes 40 cases (0.8%) for whom gender and/or age are unavailable

#### Age-Specific Mortality Rates by Gender and Ethnicity (per 100,000 population; N = 4,531\*)



To date, a total of **5,152 Bexar County residents are known to have** passed due to COVID-19. Although more cases have occurred among women (53% of all cases), males continue to account for more than half of all deaths (56%). As the top pyramid graph shows, deaths due to COVID-19 have occurred primarily among older cases<sup>1</sup>. Data pertaining to COVID-19 related deaths is still incomplete for January '22. To date, 147 cases are known to have died due to COVID-19 with onset during January, and 31 with onset during December.

Age-specific mortality rates<sup>2</sup> (curved lines on top graph, and line graph below) continue to show males have higher rates of death compared to females, in every age group 30-39 years and older. This pattern has persisted throughout the pandemic.

As shown in the lower pyramid graph, the COVID-19 case fatality rate (risk of death among cases) increases markedly with age, particularly for males. Among cases 80+ years of age, the risk of death is now 17% for males, and 13% for females. Overall, 1% of all known COVID-19 cases have died due to the disease (1% of male and 0.8% of female cases).

With a lower mortality observed thus far during the current winter surge, the cumulative case fatality rate for the entire pandemic has declined in every age group by 18% to 27% compared to the end of December. However, as additional death reports continue to be received, this decline will likely be reduced.

Whereas the average age at COVID-19 onset is 35.0 years, average age of deceased cases is 68 years (age 67 for males, 70 for females). Although persons 70 years of age and older have accounted for only 5% of all cases, they have experienced 48% of all deaths.

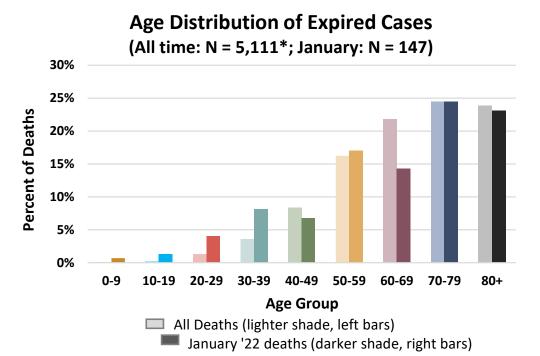
Cumulative age-adjusted mortality rate<sup>3</sup> is 354 deaths per 100,000 males, and 218 deaths per 100,000 females. The overall rate, including deceased persons for whom gender is not available (N=39), is 280 deaths per 100,000 population. (Gender is available for 99% of deceased cases.)

Among the 4,531 deceased cases for whom gender, ethnicity and age are available (88% of all deaths), age-specific and age-adjusted mortality rates differ by ethnicity as well as gender. As shown in the graph at the bottom of the page, age-specific rates are generally highest for Hispanic males, intermediate for Hispanic females and Non-Hispanic males, and lowest for Non-Hispanic females. Ageadjusted rates (per 100,000 Bexar County residents in the ethnicity and gender category) follow the same pattern: 419 deaths among Hispanic males, 255 deaths among Hispanic females, 213 deaths among Non-Hispanic males, and 124 deaths among Non-Hispanic females.

<sup>&</sup>lt;sup>1</sup> All ages and dates refer to onset of COVID-19, not age or date at death.

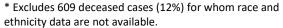
<sup>&</sup>lt;sup>2</sup> Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar

Age-adjusted rates use age-specific rates weighted according to the US Standard Population 2000



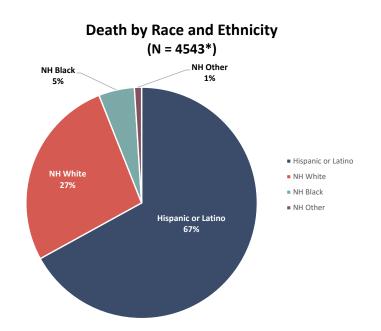
Deceased cases with Event Date in January '22 tended to be younger than deceased cases since the beginning of the pandemic: 15% of deceased January cases were age 39 years and younger, compared to 5% in this age range for the entire pandemic to date. Deaths among older cases, age 70+, were similar in both time periods (48% and 49% respectively).

Of the COVID-19 related deaths with race/ethnicity data available, Hispanic or Latino individuals continue to account for 67% of the deaths, compared to 60% of the Bexar County population identifying as Hispanic or Latino<sup>†</sup>.



<sup>†</sup> Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar County.

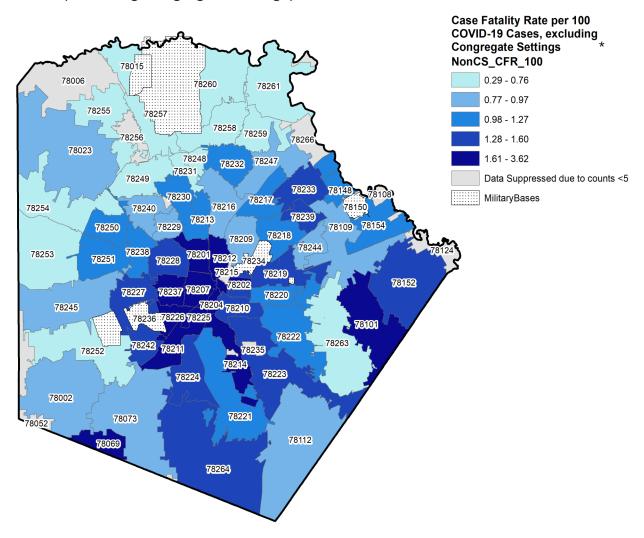
<sup>‡</sup> Age-adjusted rates use the ACS-5 yr 2019 gender-specific population estimates for Bexar County and the US Standard Population 2000 weights.



<sup>\*</sup>Excludes one death with age not available. Date refers to Event Date, not date of death.



## COVID-19 Case Fatality Rate by Zip Code (Excluding Congregate Settings) \*



The above map shows cumulative COVID-19 deaths per 100 COVID-19 cases (case fatality rate: CFR) for Bexar County zip codes, and excludes deaths that occurred to residents of congregate settings\*.

Case fatality rates have declined compared to the end of December '21, reflecting the reduced severity of most cases during the recent winter surge compared to previous surges. The overall CFR is now 1 deaths per 100 cases. By zip code, the average is 1.19 (median 1.10) with range 0.30 to 3.62 deaths per 100 cases. In general, higher CFRs (darker blues) continue to occur in zip codes closest to downtown, and in southern areas of the county, with lowest CFRs (lighter blues) generally found in the north portion of the county. This pattern has remained consistent throughout the pandemic.

Compared to the end of December, the cumulative COVID-19 case fatality rate has continued to decline in every zip code, by 0% to 13% (average 9%). This change is evident in the quintile thresholds: all are reduced compared to December.

<sup>\*</sup>Congregate settings are defined here as nursing homes, assisted living facilities, jails, homeless shelters, rehabilitation facilities, and military barracks. Source: SAMHD COVID-19 case deaths data pulled on 02/14/2022, with event dates through 1/31/2022.